

ABSTRACT OF THE DISCLOSURE

In one embodiment, the invention comprises a bridge between a flash-memory card-reader and an IDE controller. The IDE controller may be comprised in an embedded system, or any host system configured to communicate with an IDE/ATA interface. In one embodiment, the bridge comprises an IDE/ATA interface coupled to a transmit/receive buffer and an ATA command/status register emulation buffer. The bridge also comprises a control/data bus coupling a processing unit to a respective flash-memory card controller for each device/class type of flash-memory card, and to each buffer. The IDE/ATA interface receives IDE/ATA commands and data from the IDE controller, and the processing unit translates the IDE/ATA commands and status information into control and status information of a format corresponding to the device/class type used by the flash-memory card currently being accessed by the IDE controller. The translated commands are provided to the appropriate flash-memory card controller, allowing for the card controller to communicate with the host system via the host system's IDE controller.